CLAIMS:

1.    A method for determining the topology of a network when a network tree, built from data relating to discovered devices of the network, includes one or more unresolved branches, the method comprising:

for each unresolved branch of the network tree, attempting to determine the type of each of the discovered network devices on the branch, and

if the type of each discovered network device on the branch is determined to be an endstation type, inferring that an undiscovered connecting device is present on the branch.

2.    A method as claimed in claim 1, wherein, if an undiscovered network device is inferred to be present on a branch, the method further comprises:

resolving the topology of the branch by determining that the discovered network devices on the branch are connected to respective ports of the inferred connecting device.

3.    A method as claimed in claim 1, further comprising:

presenting the determined network topology as a network map, the map comprising icons representing network devices and lines representing network links, wherein the inferred connecting device is represented differently from a discovered connecting device.

4.    A method as claimed in claim 1, wherein the received data comprises address table data for the ports of one or more managed connecting devices on the network, the address table data including the identity of each said port and the identity of other network devices which the port has learnt.

5.    A method as claimed in claim 4, wherein the step of building a network tree comprises selecting a discovered connecting device as a root node, and building a data representation of the tree from the root node, the data representation comprising at

least one branch from a respective port of the root node, each branch comprising the identity of the port and the identity of at least one child node on the branch.

6.  A method as claimed in claim 5, wherein, after building the network tree, the method comprises:

   determining whether the topology of one or more branches of the tree is unresolved.

7.  A method as claimed in claim 6, wherein the step of determining whether the topology of one or more branches of the tree is unresolved comprises:

   a) selecting a port of the root node;

   b) considering whether the branch from the selected port has more than one child node, and

   c) if the branch from the port has more than one child node, determining that the branch is unresolved.

8.  A method as in claim 7, further comprising repeating steps a), b) and c) for each port of each discovered connecting device.

9.  A method as claimed in claim 1, wherein if the type of at least one discovered network device on the branch is not an endstation type, the topology of the branch is left unresolved.

10.  A method as claimed in claim 1, wherein the network tree is built using the steps of:

   receiving data relating to discovered devices on the network, and

   using the received data to build a network tree.

11.  A computer readable medium including a computer program for determining the topology of a network when a network tree, built from data relating to discovered

devices of the network, includes one or more unresolved branches, the program comprising:

a program step for attempting to determine the type of each of the discovered network devices on an unresolved branch of the network tree,, and

5      a program step for inferring that an undiscovered connecting device is present on the unresolved branch if the type of each discovered network device on the branch is determined to be an endstation type.

12.      A network management apparatus for determining the topology of a network,
10      the apparatus comprising:

a memory for receiving and storing data relating to discovered devices on the network;

a processor, coupled to the memory, the processor configured to build a network tree using the received data, and, for each unresolved branch of the network
15      tree, to attempt to determine the type of each of the discovered network devices on the branch; wherein, if the type of every discovered network device on an unresolved branch is determined to be an endstation type, the processor infers that an undiscovered connecting device is present on the branch.

20      13.      A network management apparatus as claimed in claim 12, further comprising:

means for presenting a network map showing the determined topology of the network selected from the group consisting of a display and a printer.